AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-2. (*canceled*)

3. (*currently amended*) The method according to claim 2 16, in which the strips are sliced in a direction parallel to the image edge of the scan field.

4. (*canceled*)

5. (*previously presented*) Method according to claim 16, in which in the determining step, the correlation of partial images is determined for each scan axis.

6. (*previously presented*) Method according to claim 16, in which in the determining step, deviations are determined from the correlation of the partial images.

7. (*previously presented*) Method according to claim 6, in which in the determining step, the deviations are combined as data points for a deviation curve and the deviation curve is used to determine a correction value of the scanner control.

8. (*previously presented*) Method according to claim 7, in which in the determining step, the deviation curve is correlated with the individual frequency fractions of the scanner control for determination of the correction of the scanner control and correction values for the scanner control are determined via the correlation values.

9. (*currently amended*) Method according to claim 1 16, further comprising the step of storing the correction values for the scanner control together with the time the correction values are determined.

10. (*previously presented*) Method according to claim 9, further comprising the step of comparing the correction values recorded at different times.

11. (*previously presented*) Method according to claim 16, further comprising the step of controlling or correcting the frequency of the scanner with the determined correction values.

12. (*currently amended*) Method according to claim 2̶16, in which in the step of subdividing the scan field, the slice direction of the partial image lies parallel to an image edge of the scan field.

13. (*currently amended*) Method according to claim 2̶16, in which in the step of subdividing the scan field, the slice direction of the partial images agrees with a scan axis.

14. (*currently amended*) Method according to claim 2̶16, in which in the step of subdividing the scan field, the slice direction of the partial images is at an angle to at least one scan axis.

15. (*previously presented*) Method according to claim 16, in which in the step of determining a correction value, a test pattern is used to determine the correction value.

16.   (*currently amended*) A method for scanner control in at least one scan axis in a laser scanning microscope in which a scan field is scanned line-by-line, comprising the steps of:

subdividing dividing the scan field into partial regionsstrips, in which the longitudinal axis of the strips is perpendicular to the direction of the scan lines;

generating subdividing the strips into a respective first partial image by a of forward line scan of at least one partial regionlines and a respective ;generating a second partial image by a of back line scan of the partial regionlines;

for each strip, comparing at least the respective first partial image with at least the second partial image to determine a deviationdeviations between the first and second partial images; and

determining a correction value values for the scanner control from the deviation deviations between the first and second partial images.

17.   (*currently amended*) Method according to claim 8, in which when the deviation isdeviations are caused only by a coefficient, a sine curve with nodal points at the reversal points of the line scan is always present.

18.   (*new*) Method according to claim 16, wherein offsets between the partial images are determined as the deviations by shifting the partial images in parallel with at least one of the scan axis and a second scan axis in such a way that they fit together best.